

## CLAIMS:

1. A portable communications device for sending and receiving verbal communications having a housing sized to fit a human hand, characterized by:
  - a breath analyzer within the housing for sensing volatile components of oral malodor and providing a breath analyzer output based upon the sensed volatile components; and
  - a user interface carried by the housing for providing an output based upon results of a breath test performed by the breath analyzer.
2. The portable communications device of claim 1, the breath analyzer comprising an electrochemical sensor for sensing volatile components of oral malodor and providing an electrochemical sensor output based upon the sensed volatile components.
3. The portable communications device of claim 2 wherein the breath analyzer further comprises a current-to-voltage amplifier and a voltage gain amplifier.
4. The portable communications device of claim 3 wherein the breath analyzer further comprises an analog-to-digital converter.
5. The portable communications device of claim 1 wherein the breath analyzer further comprises a controller for scaling the breath analyzer output.
6. The portable communications device of claim 1 and further comprising input for activating the breath analyzer.

7. The portable communications device of claim 1 wherein the user interface is a visual display.
8. The portable communications device of claim 7 wherein the visual display is a liquid crystal display.
9. The portable communications device of claim 7 wherein the visual display is a plasma display.
10. The portable communications device of claim 1 wherein the user interface is a speaker.
11. A cellular telephone, an improvement comprising:  
a user input to select a breath analysis;  
a breath analyzer for sensing volatile components of oral malodor  
and providing a breath analyzer output based upon the  
sensed volatile components; and  
a processor for processing the breath analyzer output and providing  
a user perceivable output reporting the breath analysis based  
on the processed breath analyzer output.
12. The cellular telephone of claim 11 wherein the breath analyzer further comprises an electrochemical sensor for sensing the volatile components of oral malodor.
13. The cellular telephone of claim 12 wherein the electrochemical sensor provides an electrochemical sensor output based upon the sensed volatile components.

14. The cellular telephone of claim 13, wherein the breath analyzer further comprises a controller for scaling the electrochemical sensor output.
15. The cellular telephone of claim 12, wherein the breath analyzer further comprises a current-to-voltage amplifier and a voltage gain amplifier.
16. The cellular telephone of claim 15, wherein the breath analyzer further comprises an analog-to-digital converter.
17. The cellular telephone of claim 11, wherein the user perceivable output is a visual display.
18. The cellular telephone of claim 17, wherein the visual display is a liquid crystal display.
19. The cellular telephone of claim 17, wherein the visual display is a plasma display.
20. The cellular telephone of claim 11, wherein the user perceivable output is an audible indicator.
21. A portable communications device comprising:
  - a keypad for selecting a breath analysis;
  - an antenna;
  - a microphone for receiving verbal signals from a user;
  - a speaker for providing audio signals to the user;
  - communications electronics connected to the microphone,

the speaker and the antenna for transmitting and receiving communications signals;  
a visual display for providing a visual output;  
a breath analyzer for sensing volatile components of oral malodor and providing a breath analyzer output based upon the sensed volatile components; and  
a digital processor for controlling the visual display to provide a visual output based on the breath analyzer output.

22. The portable communications device of claim 21, the breath analyzer comprising an electrochemical sensor for sensing volatile components of oral malodor and providing an electrochemical sensor output based upon the sensed volatile components.

23. The portable communications device of claim 22, wherein the breath analyzer further comprises a current-to-voltage amplifier and a voltage gain amplifier.

24. The portable communications device of claim 23, wherein the breath analyzer further comprises an analog-to-digital converter.

25. The portable communications device of claim 24, wherein the breath analyzer further comprises a controller for scaling the results of the electrochemical sensor output.

26. The portable communications device of claim 21, wherein the visual display is a liquid crystal display.

27. The portable communications device of claim 21, wherein the visual display is a plasma display.